

Amendments to the Claims:

The following listing of claims replaces all prior versions and listing of claims in the application:

Listing of Claims:

- 1 1. (Canceled)
- 1 2. (Currently amended) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 a first quantity of weighting agent; and
4 a second quantity of suspending agent effective to suspend said weighting
5 agent;
6 an LCM consisting essentially of:
7 a third quantity of acid soluble mineral fiber; and;
8 an amount of acid soluble mineral particulate comprising a
9 combination of granular form and flake form;
10 said third quantity, said amount and said form being adapted to form a
11 substantially impermeable, acid soluble filtercake upon injection of
12 said composition with said carrier fluid into said wellbore and
13 defluidization.
- 1 3. (Original) The high fluid loss spotting pill of claim 2 wherein said
2 first quantity of weighting agent is adapted to produce a density substantially the
3 same as the density of a drilling fluid used to drill a formation being treated.

1 4. (Original) The high fluid loss spotting pill of claim 2 wherein said
2 first quantity of weighting agent produces a spotting pill having a density of at
3 least about 9 ppg.

1 Claims 5-6. (Canceled).

1 7. (Original) The high fluid loss spotting pill of claim 2 wherein 85
2 wt.% or more of said LCM is acid soluble.

1 8. (Original) The high fluid loss spotting pill of claim 2 wherein 90
2 wt.% or more of said LCM is acid soluble.

1 9. (Original) The high fluid loss spotting pill of claim 3 wherein 85
2 wt.% or more of said LCM is acid soluble.

1 10. (Original) The high fluid loss spotting pill of claim 3 wherein 90
2 wt.% or more of said LCM is acid soluble.

1 11. (Original) The high fluid loss spotting pill of claim 4 wherein 85
2 wt.% or more of said LCM is acid soluble.

1 12. (Original) The high fluid loss spotting pill of claim 4 wherein 90
2 wt.% or more of said LCM is acid soluble.

1 Claims 13-17. (Canceled).

1 18. (Original) The high fluid loss spotting pill of claim 2 wherein said
2 acid soluble mineral particulate is selected from the group consisting of salts of
3 alkaline earth metals, silicates, hematites, and acid soluble mineral oxides.

3
RESPONSE TO FINAL OFFICE ACTION
09/997,830

1 19. (Previously presented) The high fluid loss spotting pill of claim 2
2 wherein said acid soluble mineral particulate is selected from the group consisting
3 of carbonates of alkaline earth metals and silicates of alkaline earth minerals.

1 20. (Original) The high fluid loss spotting pill of claim 2 wherein said
2 acid soluble mineral particulate is a carbonate of an alkaline earth metal.

1 21. (Canceled).

1 22. (Original) The high fluid loss spotting pill of claim 20 wherein
2 said granular form is coarse grain and said flake form is fine grain.

1 23. (Previously presented) The high fluid loss spotting pill of claim 2
2 wherein said granular form is coarse grain and said flake form is fine grain.

1 24. (Original) The high fluid loss spotting pill of claim 3 wherein said
2 acid soluble mineral particulate is selected from the group consisting of salts of
3 alkaline earth metals, silicates, hematites, and acid soluble mineral oxides.

1 25. (Original) The high fluid loss spotting pill of claim 3 wherein said
2 acid soluble mineral particulate is selected from the group consisting of preferably
3 carbonates of alkaline earth metals and silicates of alkaline earth minerals.

1 26. (Original) The high fluid loss spotting pill of claim 3 wherein said
2 acid soluble mineral particulate is a carbonate of an alkaline earth metal.

1 27. (Canceled)

1 28. (Previously presented) The high fluid loss spotting pill of claim 3
2 wherein said granular form is coarse grain and said flake form is fine grain.

1 29. (Original) The high fluid loss spotting pill of claim 4 wherein said
2 acid soluble mineral particulate is selected from the group consisting of salts of
3 alkaline earth metals, silicates, hematites, and acid soluble mineral oxides.

1 30. (Currently amended) The high fluid loss spotting pill of claim 4
2 wherein said acid soluble mineral particulate is selected from the group consisting
3 of preferably carbonates of alkaline earth metals and silicates of alkaline earth
4 minerals.

1 31. (Previously presented) The high fluid loss spotting pill of claim 4
2 wherein said acid soluble mineral particulate is a carbonate of an alkaline earth
3 metal.

1 32. (Canceled)

1 33. (Previously presented) The high fluid loss spotting pill of claim 4
2 wherein said granular form is coarse grain and said flake form is fine grain.

1 34. (Original) The high fluid loss spotting pill of claim 2 having a
2 yield point of about 5 or more.

1 35. (Original) The high fluid loss spotting pill of claim 3 having a
2 yield point of about 5 or more.

1 36. (Original) The high fluid loss spotting pill of claim 4 having a
2 yield point of about 5 or more.

1 37. (Canceled).

1 38. (Canceled).

1 39. (Previously presented) The high fluid loss spotting pill of claim
2 114 wherein said first quantity of weighting agent produces a spotting pill having
3 a density of at least about 9 ppg.

1 40. (Previously presented) The high fluid loss spotting pill of claim
2 114 wherein 85 wt.% or more of said LCM is acid soluble.

1 41. (Previously presented) The high fluid loss spotting pill of claim
2 114 wherein 90 wt.% or more of said LCM is acid soluble.

1 42. (Original) The high fluid loss spotting pill of claim 39 wherein 85
2 wt.% or more of said LCM is acid soluble.

1 43. (Original) The high fluid loss spotting pill of claim 39 wherein 90
2 wt.% or more of said LCM is acid soluble.

1 44. (Previously presented) The high fluid loss spotting pill of claim
2 114 wherein said acid soluble mineral particulate is selected from the group
3 consisting of salts of alkaline earth metals, silicates, hematites, and acid soluble
4 mineral oxides.

1 45. (Currently amended) The high fluid loss spotting pill of claim 114
2 wherein said acid soluble mineral particulate is selected from the group consisting
3 of preferably carbonates of alkaline earth metals and silicates of alkaline earth
4 minerals.

1 46. (Previously presented) The high fluid loss spotting pill of claim
2 114 wherein said acid soluble mineral particulate is a carbonate of an alkaline
3 earth metal.

6
RESPONSE TO FINAL OFFICE ACTION
09/997,830

1 47. (Currently amended) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 a first quantity of weighting agent adapted to produce a density
4 substantially the same as the density of a drilling fluid used to drill
5 a formation being treated;
6 a second quantity of suspending agent effective to suspend said weighting
7 agent in said carrier fluid;
8 an LCM consisting essentially of:
9 a third quantity of acid soluble mineral fiber; and;
10 an amount of acid soluble mineral particulate comprising a combination
11 comprising granular form and flake form;
12 wherein said acid soluble mineral particulate is selected from the group
13 consisting of preferably carbonates of alkaline earth metals and
14 silicates of alkaline earth minerals;
15 said third quantity, said amount, and said form being adapted to form a
16 substantially impermeable, acid soluble filtercake upon injection of
17 said composition with an effective carrier fluid into said wellbore
18 and defluidization.

1 48. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;

7
RESPONSE TO FINAL OFFICE ACTION
09/997,830

3 a first quantity of weighting agent adapted to produce a density
4 substantially the same as the density of a drilling fluid used to drill
5 a formation being treated;
6 a second quantity of suspending agent effective to suspend said weighting
7 agent in said carrier fluid;
8 an LCM consisting essentially of:
9 a third quantity of acid soluble mineral fiber; and;
10 an amount of acid soluble mineral particulate comprising a
11 carbonate of an alkaline earth metal, wherein said acid soluble
12 mineral particulate is a combination of granular form and flake
13 form;
14 said third quantity, said amount, and said form being adapted to form a
15 substantially impermeable, acid soluble filtercake upon injection of
16 said composition with an effective carrier fluid into said wellbore
17 and defluidization.

1 49. (Original) The high fluid loss spotting pill of claim 47 wherein
2 said granular form is fine grain and said flake form is fine grain.

1 50. (Original) The high fluid loss spotting pill of claim 39 wherein
2 said acid soluble mineral particulate is selected from the group consisting of salts
3 of alkaline earth metals, silicates, hematites, and acid soluble mineral oxides.

1 51. (Currently amended) The high fluid loss spotting pill of claim 39
2 wherein said acid soluble mineral particulate is selected from the group consisting

3 of preferably carbonates of alkaline earth metals and silicates of alkaline earth
4 minerals.

1 52. (Original) The high fluid loss spotting pill of claim 39 wherein
2 said acid soluble mineral particulate is calcium carbonate.

1 53. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 a first quantity of weighting agent adapted to produce said spotting pill
4 having a density of about 9 ppg;
5 a second quantity of suspending agent effective to suspend said weighting
6 agent in said carrier fluid;
7 an LCM consisting essentially of:
8 a third quantity of acid soluble mineral fiber; and,
9 an amount of acid soluble mineral particulate comprising calcium
10 carbonate comprising a combination of granular form and
11 flake form;
12 said third quantity, said amount, and said form being adapted to form a
13 substantially impermeable, acid soluble filtercake upon injection of
14 said composition with an effective carrier fluid into said wellbore
15 and defluidization.

1 54. (Original) The high fluid loss spotting pill of claim 53 wherein
2 said granular form is fine grain and said flake form is fine grain.

9
RESPONSE TO FINAL OFFICE ACTION
09/997,830

1 55. (Previously presented) The high fluid loss spotting pill of claim
2 114 having a yield point of about 5 or more.

1 56. (Original) The high fluid loss spotting pill of claim 39 having a
2 yield point of about 5 or more.

1 57. (Canceled).

1 58. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;

3 a first quantity of weighting agent adapted to produce a density
4 substantially the same as the density of a drilling fluid used to drill
5 a formation being treated;

6 a second quantity of suspending agent effective to suspend said weighting
7 agent in said carrier fluid;

8 an amount of LCM consisting essentially of calcium carbonate particulate
9 comprising granular form and flake form;

10 said quantity, said amount, and said form being adapted to form a
11 substantially impermeable, acid soluble filtercake upon injection of
12 said composition with an effective carrier fluid into said wellbore
13 and defluidization.

1 59. (Original) The high fluid loss spotting pill of claim 58 wherein
2 said granular form is coarse grain and said flake form is fine grain.

1 60. (Canceled)

1 61. (Original) The high fluid loss spotting pill of claim 58 wherein
2 said first quantity of said weighting agent produces a spotting pill having a
3 density of at least about 9 ppg.

1 62. (Original) The high fluid loss spotting pill of claim 59 wherein
2 said first quantity of said weighting agent produces a spotting pill having a
3 density of at least about 9 ppg.

1 63. (Canceled).

1 64. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 a first quantity of weighting agent adapted to produce a density
4 substantially the same as the density of a drilling fluid used to drill
5 a formation being treated;
6 a second quantity of suspending agent effective to suspend said weighting
7 agent in said carrier fluid;
8 an LCM consisting essentially of:
9 a third quantity of acid soluble mineral fiber; and;
10 an amount of calcium carbonate particulate comprising granular
11 form and flake form;
12 said quantity, said amount, and said form being adapted to form a
13 substantially impermeable, acid soluble filtercake upon injection of
14 said composition with an effective carrier fluid into said wellbore
15 and defluidization.

11

RESPONSE TO FINAL OFFICE ACTION
09/997,830

1 65. (Previously presented) The high fluid loss spotting pill of claim 64
2 wherein said granular form is fine grain and said flake form is fine grain.

3
1 66. (Canceled)
2

1 67. (Original) The high fluid loss spotting pill of claim 64 wherein
2 said first quantity of said weighting agent produces a spotting pill having a
3 density of at least about 9 ppg.

1 68. (Original) The high fluid loss spotting pill of claim 65 wherein
2 said first quantity of said weighting agent produces a spotting pill having a
3 density of at least about 9 ppg.

1 69. (Previously presented) The high fluid loss spotting pill of claim 64
2 wherein said carrier fluid is water based.

1 70. (Previously presented) The high fluid loss spotting pill of claim 64
2 wherein said carrier fluid is oil based.

1 71. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 a first quantity of weighting agent adapted to produce a density
4 substantially the same as the density of a drilling fluid used to drill
5 a formation being treated;
6 a second quantity of suspending agent effective to suspend said weighting
7 agent in said carrier fluid;
8 an amount of LCM consisting essentially of calcium carbonate particulate;

12
RESPONSE TO FINAL OFFICE ACTION
09/997,830

9 said quantity, said amount, and said form being adapted to form a
10 substantially impermeable, acid soluble filtercake upon injection of
11 said composition with an effective carrier fluid into said wellbore
12 and defluidization;

13 wherein the following weight percent of the composition passes through
14 screens having the following mesh sizes:

| | | | | | |
|----|-----|----|------|----|----|
| 15 | 10 | 5 | % to | 10 | % |
| 16 | 14 | 5 | % to | 10 | % |
| 17 | 18 | 1 | % to | 5 | % |
| 18 | 20 | 1 | % to | 5 | % |
| 19 | 25 | 1 | % to | 5 | % |
| 20 | >25 | 87 | % to | 65 | %. |

1 72. (Previously presented) The high fluid loss spotting pill of claim 64
2 wherein the following weight percent of the composition passes through screens
3 having the following mesh sizes:

| | | | |
|---|----|---|----|
| 4 | 10 | 8 | % |
| 5 | 14 | 7 | % |
| 6 | 18 | 3 | % |
| 7 | 20 | 1 | % |
| 8 | 25 | 1 | %. |

1 73. (Previously presented) The high fluid loss spotting pill of claim 58
2 wherein said third quantity is 10 wt.% or more of said composition.

1 74. (Previously presented) The high fluid loss spotting pill of claim 58
2 wherein said third quantity is about 25 wt.% of said composition.

1 75. (Original) The high fluid loss spotting pill of claim 73 wherein
2 said amount is about 50 wt.% of said composition.

1 76. (Original) The high fluid loss spotting pill of claim 74 wherein
2 said amount is about 50 wt.% of said composition.

1 77. (Original) The high fluid loss spotting pill of claim 59 wherein
2 said third quantity is 10 wt.% or more of said composition.

1 78. (Original) The high fluid loss spotting pill of claim 59 wherein
2 said third quantity is about 25 wt.% of said composition.

1 79. (Original) The high fluid loss spotting pill of claim 77 wherein
2 said amount is about 50 wt.% of said composition.

1 80. (Original) The high fluid loss spotting pill of claim 78 wherein
2 said amount is about 50 wt.% of said composition.

1 81. (Previously presented) The high fluid loss spotting pill of claim 64
2 wherein said third quantity is 10 wt.% or more of said composition.

1 82. (Previously presented) The high fluid loss spotting pill of claim 64
2 wherein said third quantity is about 25 wt.% of said composition.

1 83. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;

3 a first quantity of weighting agent adapted to produce a density

4 substantially the same as the density of a drilling fluid used to drill

5 a formation being treated;

6 a second quantity of suspending agent effective to suspend said weighting

7 agent in said carrier fluid;

8 an LCM consisting essentially of:

9 a third quantity of acid soluble mineral fiber, said third quantity
10 comprising 10% or more of said composition; and;
11 an amount of calcium carbonate particulate, said amount comprising about
12 50 wt.% of said composition;
13 said quantity, said amount, and said form being adapted to form a
14 substantially impermeable, acid soluble filtercake upon injection of
15 said composition with an effective carrier fluid into said wellbore
16 and defluidization.

1 84. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 a first quantity of weighting agent adapted to produce a density
4 substantially the same as the density of a drilling fluid used to drill
5 a formation being treated;
6 a second quantity of suspending agent effective to suspend said weighting
7 agent in said carrier fluid;
8 an LCM consisting essentially of:
9 a third quantity of acid soluble mineral fiber, said third quantity
10 comprising 25% or more of said composition; and;
11 an amount of calcium carbonate particulate, said amount
12 comprising about 50 wt.% of said composition;
13 said quantity, said amount, and said form being adapted to form a
14 substantially impermeable, acid soluble filtercake upon injection of

15
RESPONSE TO FINAL OFFICE ACTION
09/997,830

15 said composition with an effective carrier fluid into said wellbore
16 and defluidization.

1 85. (Original) The high fluid loss spotting pill of claim 65 wherein
2 said third quantity is 10 wt.% or more of said composition.

1 86. (Original) The high fluid loss spotting pill of claim 65 wherein
2 said third quantity is about 25 wt.% of said composition.

1 87. (Original) The high fluid loss spotting pill of claim 85 wherein
2 said amount is about 50 wt.% of said composition.

1 88. (Original) The high fluid loss spotting pill of claim 86 wherein
2 said amount is about 50 wt.% of said composition.

1 89. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 an LCM consisting essentially of an amount and form of acid soluble
4 mineral particulate comprising granular form and flake form;
5 said amount and said form being adapted to form a substantially
6 impermeable, acid soluble filtercake upon injection of said
7 composition with said carrier fluid into said wellbore and
8 defluidization;
9 a first quantity of weighting agent; and
10 a second quantity of suspending agent effective to suspend said weighting
11 agent, said suspending agent being selected from the group

12 consisting of attapulgite, quaternized attapulgite, and a
13 combination thereof.

1 90. (Original) The high fluid loss spotting pill of claim 3 wherein said
2 suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 91. (Original) The high fluid loss spotting pill of claim 4 wherein said
2 suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 92. (Original) The high fluid loss spotting pill of claim 7 wherein said
2 suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 93. (Original) The high fluid loss spotting pill of claim 20 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 94. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 a first quantity of weighting agent;
4 a second quantity of suspending agent effective to suspend said weighting
5 agent, wherein said suspending agent is selected from the group
6 consisting of attapulgite and quaternized attapulgite;
7 an LCM consisting essentially of:
8 a third quantity of acid soluble mineral fiber; and;

17

RESPONSE TO FINAL OFFICE ACTION

09/997,830

9 an amount of acid soluble mineral particulate comprising a
10 carbonate of an alkaline earth metal, wherein said particulate is a
11 combination of granular form and flake form;
12 said third quantity, said amount and said form being adapted to form a
13 substantially impermeable, acid soluble filtercake upon injection of
14 said composition with said carrier fluid into said wellbore and
15 defluidization.

1 95. (Original) The high fluid loss spotting pill of claim 23 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 96. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 a first quantity of weighting agent adapted to produce a density
4 substantially the same as the density of a drilling fluid used to drill
5 a formation being treated;
6 a second quantity of suspending agent effective to suspend said weighting
7 agent in said carrier fluid wherein said suspending agent is selected
8 from the group consisting of attapulgite and quaternized
9 attapulgite;
10 an LCM consisting essentially of:
11 a third quantity of acid soluble mineral fiber; and;
12 an amount of acid soluble mineral particulate;

13 said third quantity, said amount, and said form being adapted to form a
14 substantially impermeable, acid soluble filtercake upon injection of
15 said composition with an effective carrier fluid into said wellbore
16 and defluidization.

1 97. (Original) The high fluid loss spotting pill of claim 40 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 98. (Original) The high fluid loss spotting pill of claim 45 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 99. (Original) The high fluid loss spotting pill of claim 49 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 100. (Original) The high fluid loss spotting pill of claim 54 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 101. (Canceled)

1 102. (Original) The high fluid loss spotting pill of claim 58 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 103. (Original) The high fluid loss spotting pill of claim 59 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 104. (Canceled).

1 105. (Original) The high fluid loss spotting pill of claim 64 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 106. (Original) The high fluid loss spotting pill of claim 65 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 107. (Original) The high fluid loss spotting pill of claim 68 wherein
2 said suspending agent is selected from the group consisting of attapulgite and
3 quaternized attapulgite.

1 108. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 an LCM consisting essentially of an amount and form of acid soluble
4 mineral particulate;
5 said amount and said form being adapted to form a substantially
6 impermeable, acid soluble filtercake upon injection of said
7 composition with said carrier fluid into said wellbore and
8 defluidization.
9 a first quantity of weighting agent; and

20

RESPONSE TO FINAL OFFICE ACTION
09/997,830

10 a second quantity of suspending agent effective to suspend said weighting
11 agent, wherein said suspending agent comprises a ratio of
12 attapulgate to quaternized attapulgate.

1 109. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;

3 an LCM consisting essentially of an amount and form of acid soluble
4 mineral particulate;

5 said amount and said form being adapted to form a substantially
6 impermeable, acid soluble filtercake upon injection of said
7 composition with said carrier fluid into said wellbore and
8 defluidization.

9 a first quantity of weighting agent; and

10 a second quantity of suspending agent effective to suspend said weighting
11 agent, said suspending agent comprising a ratio of attapulgate to
12 quaternized attapulgate;

13 wherein said first quantity of weighting agent is adapted to produce a
14 density substantially the same as the density of a drilling fluid used
15 to drill a formation being treated.

1 110. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;

3 a first quantity of weighting agent adapted to produce a density
4 substantially the same as the density of a drilling fluid used to drill
5 a formation being treated;
6 a second quantity of suspending agent effective to suspend said weighting
7 agent in said carrier fluid, said suspending agent comprising a ratio
8 of attapulgite to quaternized attapulgite;
9 an amount of LCM consisting essentially of calcium carbonate particulate;
10 said quantity, said amount, and said form being adapted to form a
11 substantially impermeable, acid soluble filtercake upon injection of
12 said composition with an effective carrier fluid into said wellbore
13 and defluidization.

1 111. (Previously presented) The high fluid loss spotting pill of claim
2 109 wherein said ratio is about 50:50.

1 112. (Previously presented) The high fluid loss spotting pill of claim
2 110 wherein said ratio is about 50:50.

1 113. (Original) The high fluid loss spotting pill of claim 115 wherein
2 said ratio is about 50:50.

1 114. (Previously presented) A high fluid loss spotting pill comprising:
2 a carrier fluid;
3 a first quantity of weighting agent adapted to produce a density
4 substantially the same as the density of a drilling fluid used to drill
5 a formation being treated;

22
RESPONSE TO FINAL OFFICE ACTION
09/997,830

6 a second quantity of suspending agent effective to suspend said weighting
7 agent in said carrier fluid;
8 an LCM consisting essentially of:
9 a third quantity of acid soluble mineral fiber; and;
10 an amount of acid soluble mineral particulate wherein said acid
11 soluble mineral particulate is a combination of granular form and
12 flake form;
13 said third quantity, said amount, and said form being adapted to form a
14 substantially impermeable, acid soluble filtercake upon injection of
15 said composition with an effective carrier fluid into said wellbore
16 and defluidization.